

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,779	11/16/2001	Yoshiko lida	862.C2439	7713
5514	7590 11/01/2006		EXAM	INER
	CK CELLA HARPER &	ROBINSON, MYLES D		
30 ROCKEFE NEW YORK.	ELLER PLAZA NY 10112		ART UNIT	PAPER NUMBER
,			2625	
			DATE MAILED: 11/01/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/987,779	IIDA ET AL.			
Office Action Summary	Examiner	Art Unit			
	Myles D. Robinson	2625			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be tinwill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 31 Ju	<u>uly 2006</u> .				
·=	This action is FINAL . 2b)⊠ This action is non-final.				
,	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.			
Disposition of Claims					
4) ⊠ Claim(s) 14 - 19 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 14 - 19 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or	wn from consideration.				
Application Papers					
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 16 November 2001 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Example 11.	re: a)⊠ accepted or b)⊡ objec drawing(s) be held in abeyance. Se tion is required if the drawing(s) is ob	ee 37 CFR 1.85(a). Djected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) ☒ Acknowledgment is made of a claim for foreign a) ☒ All b) ☐ Some * c) ☐ None of: 1. ☒ Certified copies of the priority document 2. ☐ Certified copies of the priority document 3. ☐ Copies of the certified copies of the priority document application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)).	ion No ed in this National Stage			
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) \(\sum \) Interview Summary Paper No(s)/Mail D	Pate			
Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal I	atent Application			

Application/Control Number: 09/987,779 Page 2

Art Unit: 2625

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/31/2006 has been entered.

Response to Amendment

2. Applicant's amendment was received on 7/31/2006, and has been entered and made of record. Currently, **claims 14 – 19** are pending.

Response to Arguments

- 3. Applicant's arguments with respect to **claims 14, 18 and 19** have been considered but are moot in view of the new ground(s) of rejection.
- 4. Regarding **claims 14, 18 and 19**, the Applicant argues that **Yoda** (U.S. Patent No. 6,781,716) does not disclose, teach or suggest acquiring spectral data and generating color data to be output to the image processing unit from the acquired spectral data (see Remarks [page 9, line 15 page 10, line 3]).

Application/Control Number: 09/987,779 Page 3

Art Unit: 2625

However, Yoda does disclose acquiring spectral data (see Fig. 1, scanner 10 obtains input color data as spectral data in step (a) of Fig. 14 [column 2, lines 42 – 48, column 9, lines 47 – 56, column 19, lines 23 – 32 and column 21, lines 24 – 28]) and generating color data to be output to the image processing unit from the acquired spectral data (see Fig. 5, personal computer 20 comprising color conversion table 342 and Fig. 12, data conversion section 320 wherein color input data obtained via scanner 10 undergoes conversion to make compatible with the output device [column 19, lines 23 – 32]).

Therefore, the Applicant's arguments regarding claims 14, 18 and 19 are considered not persuasive. Please cite rationale of the grounds of rejection below for further explanation.

Information Disclosure Statement

5. In reply to the Applicant's Remarks, the Examiner called via phone the Applicant on 10/26/2006 to request that the Applicant fax a supplemental Information Disclosure Statement (IDS) with the filing date of 3/22/2002, a copy of the return postcard and copies of cited documents that are otherwise not U.S. patent documents. Upon receipt of these items, the Examiner will review for consideration.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 2625

7. Claims 14 – 16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoda (U.S. Patent No. 6,781,716) in view of Hinds et al. (U.S. Patent No. 7,092,119).

Referring to **claim 19**, Yoda discloses an image processing apparatus for performing color processing to output color data to an image processing <u>unit</u> (see Fig. 1, printing system 30 [column 9, lines 57 – 64]), comprising:

an acquiring section (see Fig. 1, scanner 10, Fig. 4, input profile, Fig. 14, step (a) [column 9, lines 47 – 56]), arranged to obtain spectral data which indicates an input color (column 2, lines 42 – 48, column 9, lines 47 – 56, column 10, line 49 – column 11, line 4, column 18, lines 28 – 36, column 19, lines 15 – 18, 23 – 32 and column 21, lines 24 – 28),

a determiner (see Figs. 5, 12, 13, output profile 343a, 343b, 343m in conjunction with color conversion table 342), arranged to determine a color data format of color data in accordance with information of the image processing unit to output the color data to the image processing unit (column 11, lines 5 – 36, column 12, lines 10 – 31, column 18, lines 47 – 56, column 18, line 62 – column 19, line 10, column 20, lines 24 – 50 and column 21, line 29 – column 22, line 2),

a generator (see Fig. 5, personal computer 20 comprising color conversion table 342, Fig. 12, data conversion section 320), arranged to generate the color data having the determined color data format from the acquired spectral data (see Fig. 14, step (b) [column 9, lines 34 – 40, column 12, line 32 – column 14, line 4, column 18, lines 37 – 46, column 19, lines 11 – 14, column 21, line 29 – column 22, line 2]), and

Art Unit: 2625

an outputting section (see Fig. 3, output interface 317, Fig. 5, output profile, Figs. 12 – 13, data output section 330), arranged to output the generated color data to the image processing unit (see Fig. 14, step (b) [column 2, lines 42 – 48, column 9, lines 57 – 64, 57 – 64, column 19, lines 21 – 23 and column 21, line 29 – column 22, line 2]),

wherein the color data format includes a spectral data format (see Fig. 6 wherein RGB color data is the spectral data format inputted into the system [column 9, lines 29 – 46 and column 11, lines 5 – 59]), and a color component format which indicates a color using a plurality of color component data (see Fig. 6 wherein CMYK color data is the color component data format outputted from the system [column 9, lines 29 – 46 and column 11, lines 5 – 59]), and said generator calculates the plurality of color component data from the spectral data when the color component format is determined as the color data format by said determiner (column 12, line 32 – column 14, line 4) but does not explicitly disclose the apparatus further comprising the acquiring section to acquire characteristic information of the image processing unit, and the determiner, arranged to determine a color data format of color data in accordance with the characteristic information of the image processing unit to output the color data to the image processing unit.

Hinds discloses the apparatus comprising:

an acquiring section (see Fig. 1, clients 4a, 4b requests information from servers 6a, 6b in blocks 52 – 54 of Fig. 2 [column 3, liens 1 – 17 and column 5, line 38 – column 6, line 13]) to acquire characteristic information of the image processing unit (column 4, lines 46 – 61 wherein the produced calibration curves are tailored to incorporate

Application/Control Number: 09/987,779

Art Unit: 2625

characteristic information of the printers [e.g. target printer type, paper, toner, environmental factors, etc.] into mapping from the device independent input color space to the printer color space), and

a determiner (see Fig. 1, clients 4a, 4b), arranged to determine a color data format of color data in accordance with the characteristic information of the image processing unit to output the color data to the image processing unit (see Fig. 2, blocks 56 – 58 wherein the user via the GUIs of clients 4a, 4b determines the calibration options [column 6, lines 9 – 18]).

Yoda and Hinds are combinable because they are both from the same field of endeavor, being color printing systems. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include acquiring characteristic information of the printers and determining the color format to output the color data from a particular printer along with color printing systems. The suggestion/motivation for doing so would have been to effectively and automatically manage user generated calibration files, especially when there are a large quantity of files and different printers to be managed, as suggested by Hinds (*column 1*, *lines 41 – 54 and column 2*, *lines 7 – 32*).

Referring to **claim 14**, the rationale provided in the rejection of claim 19 is incorporated herein. In addition, the apparatus of claim 19 performs the method of claim 14.

Referring to **claim 18**, the rationale provided in rejection of claim 14 is incorporated herein. The method of claim 14 is stored as a program of instructions of claim 18 within memory and executed by a processor (see Yoda [see Fig. 3, CPU 211,

Art Unit: 2625

CD-ROM 110, hard disk unit 213 [column 10, lines 22 – 48] and see Hinds [column 10, lines 29 – 42]]).

Referring to **claim 15**, Yoda discloses the method further wherein the acquired spectral data is output to the image processing component when the spectral data format is determined as the color data format in said determining step (see Fig. 14, step (b) [column 9, lines 57 – 64, 57 – 64, column 19, lines 21 – 23, column 20, lines 51 – 64 and column 21, line 29 – column 22, line 2]).

Referring to **claim 17**, Arai et al. disclose the method further comprising the step of obtaining the information, for which the color data format is determined, from the image processing component (*column 11*, *lines 30 –36 and column 20*, *lines 51 – 64*).

8. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoda (U.S. Patent No. 6,781,716) in view of Hinds et al. (U.S. Patent No. 7,092,119) and further in view of Rasmussen et al. (U.S. Patent No. 6,571,000).

Referring to **claim 16**, Yoda discloses the method further wherein the plurality of color component data is generated by a color matching function (*column 12*, *lines 25* – 31, 40 – 49 and column 17, lines 18 – 36 wherein the output file perform such color conversion that in the necessary color area the associated color appearance is preserved). However, neither Yoda nor Hinds explicitly disclose the method wherein the plurality of color component data are generated by convolution calculation.

Rasmussen discloses the method further wherein the plurality of color component data is generated by convolution calculation (see Fig. 5, step S610 [column 4, lines 34 – 44, column 5, lines 46 – 48 and column 9, lines 12 – 23]).

Yoda, Hinds and Rasmussen are combinable because they are both from the same field of endeavor, being color printing systems. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include generating color data via convolution calculations along with a color attribute control system. The suggestion/motivation for doing so would have been to enhance image quality especially in correcting color non-uniformity such as in moiré patterns, as suggested by Rasmussen (column 1, lines 33 – 53, column 2, lines 49 – 63, column 9, lines 12 – 23 and column 10, lines 43 – 51).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myles D. Robinson whose telephone number is (571) 272-5944. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 09/987,779 Page 9

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MDR

10/26/06

SUPERVISORY PATENT EXAMINER